



6CB5-A

# BEAM POWER TUBE

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## GENERAL DATA

### Electrical:

Heater, for Unipotential Cathode:

Voltage (AC or DC) . . . . .  $6.3 \pm 10\%$  volts  
Current . . . . . 2.5 amp

Direct Interelectrode Capacitances (Approx.):<sup>o</sup>

Grid No.1 to plate. . . . . 0.4  $\mu$ f  
Grid No.1 to cathode & grid No.3,  
grid No.2, and heater . . . . . 22  $\mu$ f  
Plate to cathode & grid No.3,  
grid No.2, and heater . . . . . 10  $\mu$ f

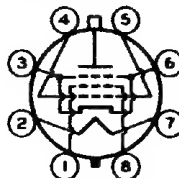
### Characteristics, Class A<sub>1</sub> Amplifier:

Plate Voltage . . . . . 75 175 volts  
Grid-No.2 Voltage . . . . . 150 175 volts  
Grid-No.1 Voltage . . . . . 0 -30 volts  
Mu-Factor, Grid No.2 to Grid No.1 . . . . . - 3.8  
Plate Resistance (Approx.) . . . . . - 5000 ohms  
Transconductance. . . . . - 8800  $\mu$ mhos  
Plate Current . . . . . 460\* 90 ma  
Grid-No.2 Current . . . . . 42\* 6 ma  
Grid-No.1 Voltage (Approx.)  
for plate ma. = 1 . . . . . - -60 volts

### Mechanical:

Operating Position. . . . . Any  
Maximum Overall Length. . . . . 5"  
Seated Length . . . . . 4-1/4"  $\pm$  3/16"  
Maximum Diameter. . . . . 1-23/32"  
Bulb. . . . . T12  
Cap. . . . . Small (JEDEC No.C1-1)  
Base. . . . . Short Jumbo-Shell Octal 8-Pin  
with External Barriers (JEDEC Group 1, No.B8-71),  
or Short Medium-Shell Octal 8-Pin  
with External Barriers, Style B (JEDEC Group 1, No.B8-118)  
Basing Designation for BOTTOM VIEW. . . . . 8GD

Pin 1-Grid No.2  
Pin 2-Heater  
Pin 3-Cathode,  
Grid No.3  
Pin 4-Grid No.1  
Pin 5-Grid No.1



Pin 6-Cathode,  
Grid No.3  
Pin 7-Heater  
Pin 8-Grid No.2  
Cap-Plate

## HORIZONTAL-DEFLECTION AMPLIFIER

### Maximum Ratings, Design-Maximum Values:

For operation in a 525-line, 30-frame system<sup>□</sup>

DC (including boost) PLATE VOLTAGE. . . 880 max. volts  
PEAK POSITIVE-PULSE PLATE VOLTAGE\*. . . 6800 max. volts

← Indicates a change.

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PEAK NEGATIVE-PULSE PLATE VOLTAGE . . .	1650	max.	volts
DC GRID-No.2 (SCREEN-GRID) VOLTAGE. . .	220	max.	volts
DC GRID-No.1 (CONTROL-GRID) VOLTAGE. . .	-55	max.	volts
PEAK NEGATIVE-PULSE GRID-No.1 VOLTAGE .	220	max.	volts
CATHODE CURRENT:			
Peak. . . . .	850	max.	ma
DC. . . . .	240	max.	ma
GRID-No.2 INPUT . . . . .	4	max.	watts
PLATE DISSIPATION†. . . . .	26	max.	watts
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode. . . . .	200	max.	volts
Heater positive with respect to cathode. . . . .	200 <sup>▲</sup>	max.	volts
BULB TEMPERATURE (At hottest point on bulb surface). . . . .	220	max.	°C

**Maximum Circuit Values:**

Grid-No.1-Circuit Resistance:

For grid-resistor-bias operation. . . 0.47 max. megohm

○ Without external shield.

\* These values can be measured by a method involving a recurrent wave form such that the maximum ratings of the tube will not be exceeded.

□ As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations," Federal Communications Commission.

# The duration of the voltage pulse must not exceed 15 per cent of one horizontal scanning cycle. In a 525-line, 30-frame system, 15 per cent of one horizontal scanning cycle is 10 microseconds.

† An adequate bias resistor or other means is required to protect the tube in the absence of excitation.

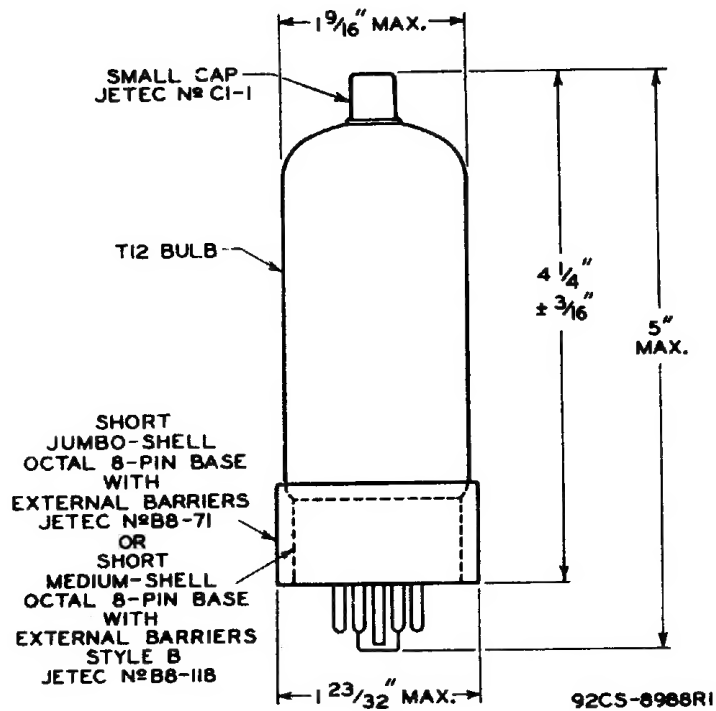
▲ The dc component must not exceed 100 volts.



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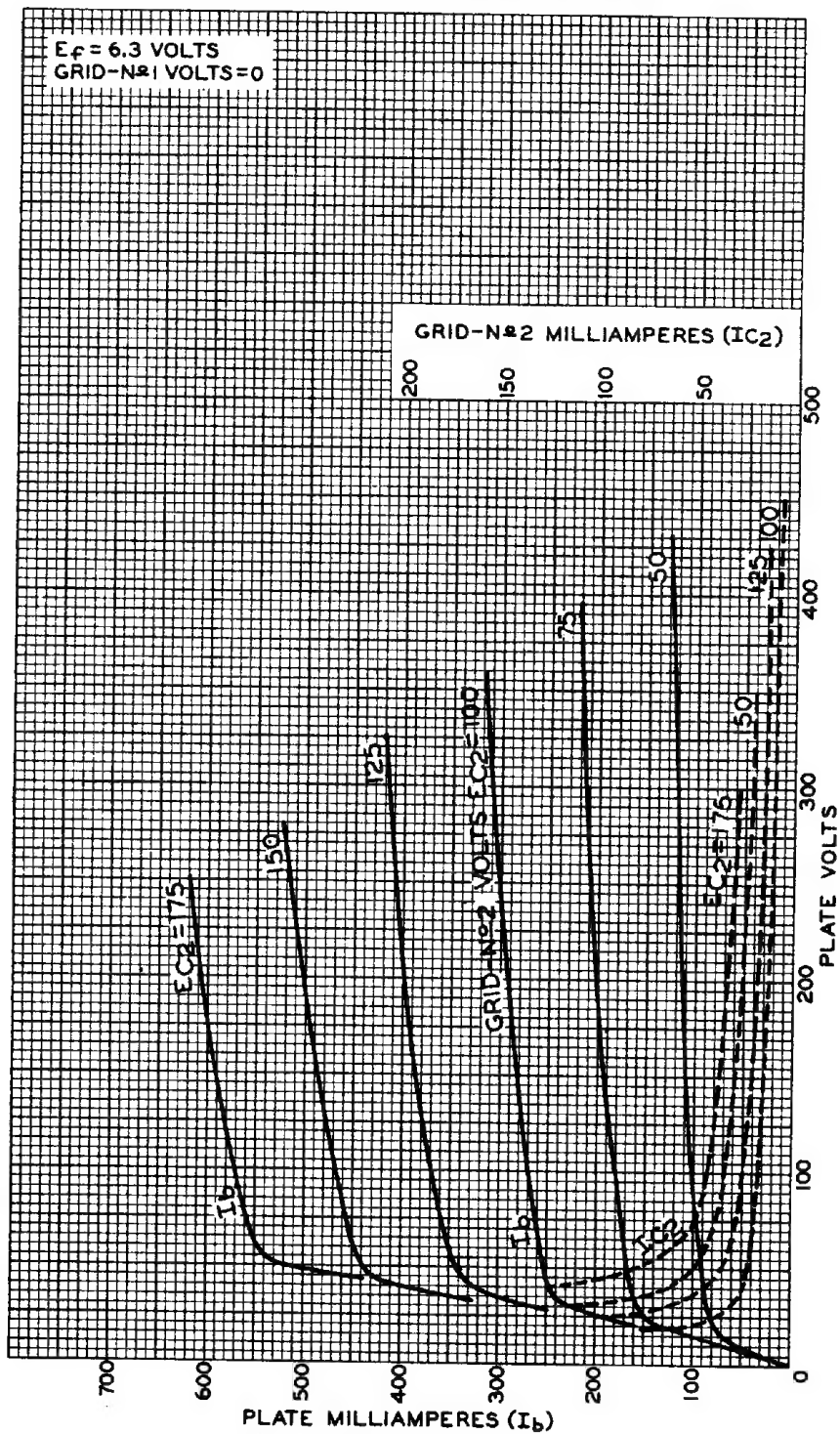
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### AVERAGE CHARACTERISTICS



**TUBE DIVISION**  
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

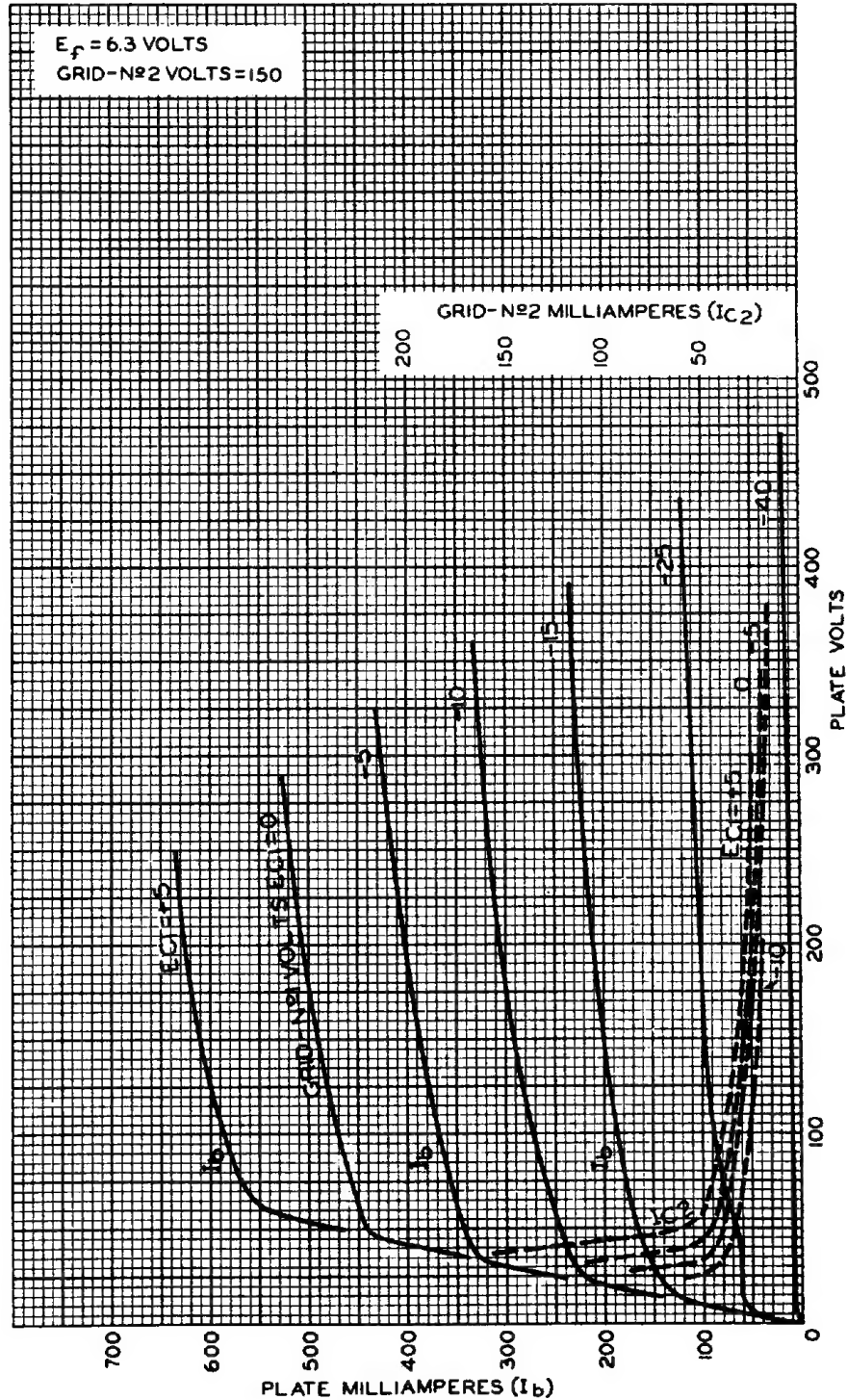
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